

Date: Friday, 16/01/2009 7:41:05 AM  
 User: Chantal Lavoie

## Process Sheet

Customer : CU-DAR001 Dart Helicopters Services Drawing Name : GAS SPRING  
 Job Number : 44858  
 Estimate Number : 13065  
 P.O. Number :  
 This Issue : 16/01/2009 S.O. No. :  
 Prsht Rev. : NC  
 First Issue : / / Type : PURCHASED PARTS  
 Previous Run : 43901  
 Written By :  
 Checked & Approved By :  
 Comment : Est: D 07.11.12 ecn1019, replaces D2807 EC verified by DD  
 Est Rev:E 08-02-12 ECN 1111 DD verified by: ec

Part Number : D2807041  
 Drawing Number : D2807 REV E  
 Project Number : N/A  
 Drawing Revision : E  
 Material :  
 Due Date : 28/01/2009 Qty: 40 Um: Each

## Additional Product

Job Number:



Seq. #: Machine Or Operation: Description :

1.0 PG PURCHASING



Comment: PURCHASING

Issue P/O: 7710C209/01/16(40)

Order as per Dwg D2807

Possible supplier: Lift Support Technologies, Saskatoon, Canada

P/N 6/15-164/50-115N

Material release note is required

2.0 615 16450 115N Gas Spring



Comment: Qty.: 1.0000 Each(s)/Unit Total: 40.0000 Each(s)  
 SUPPORT PROP

3.0 PACKAGING 1 PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Receive &amp; Inspect for Transit Damage

Ensure Material Release Note is attached

4.0 QC6 DIMENSIONAL CHECK



Comment: DIMENSIONAL CHECK

C209/13  
090219  
QSP019

(40)

5.0 D36711 Placard



Comment: Qty.: 1.0000 Each(s)/Unit Total: 40.0000 Each(s)  
 PLACARD  
 batch: B43945

(12X)B44911(29K)2/09/02/19

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

Date: Friday, 16/01/2009 7:41:05 AM  
User: Chantal Lavoie

## Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: GAS SPRING

Job Number: 44858

Part Number: D2807041

Job Number:



Seq. #:

Machine Or Operation:

Description :

6.0

SMALL FAB 1

SMALL & MEDIUM FAB RESOURCE 1



Comment: SMALL & MEDIUM FAB RESOURCE 1

1-install D3671-1 as per dwg D2807

09/02/19

41X

7.0

QC5

INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

SB 09/02/19 (41)

8.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Identify and Stock  
Location: 48

9/2/19

41X

SLP

9.0

QC21

FINAL INSPECTION/W/O RELEASE



Comment: FINAL INSPECTION/W/O RELEASE

09/02/23

Job Completion



MF 09-02-20

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

# SPECIFICATION CONTROL DRAWING

SHOP COPY  
RETURN TO  
ENGINEERING  
UNCONTROLLED COPY  
SUBJECT TO AMENDMENT  
WITHOUT NOTICE  
WORK ORDER  
NO. 44858

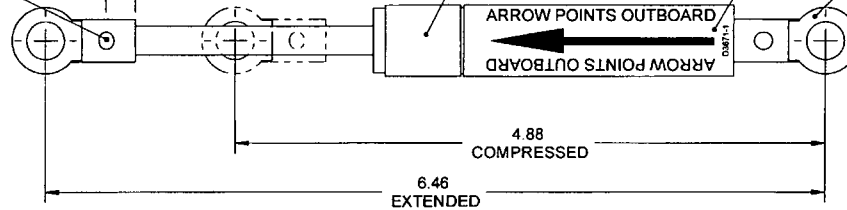
(ALTERNATE ONLY)  
CRIMP 0.015-0.025 DEEP  
WITH  $\varnothing 0.375$  TOOL AT  
2000psi (REF), TYP TWO  
SIDES PER LUG

0.24 TO CRIMP  
(TYP)

D2807-5  
OR  
(ALTERNATE ONLY) D2807-1

AFFIX D3671-1 PLACARD  
ENSURE PLACARD DOES NOT  
CONCEAL ANY TEXT OR MARKINGS  
ON THE GAS SPRING

(ALTERNATE ONLY) D2807-3  
BOTH ENDS



**D2807-041 GAS SPRING**

RELEASED  
10-12-10

## D2807-041 GAS SPRING ASSEMBLY PARTS LIST

QTY -041	PART NUMBER	DESCRIPTION
X	D2807-041	GAS SPRING ASSEMBLY
1	D2807-5	GAS SPRING
1	D3671-1	PLACARD

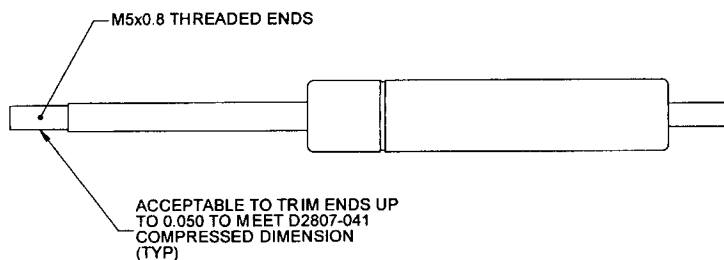
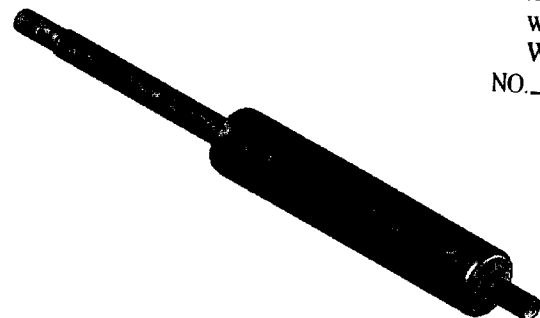
### NOTES:

- 1) MATERIAL: N/A
- 2) FINISH: N/A
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: N/A
- 6) IDENTIFICATION: N/A
- 7) WEIGHT: 0.169 LBS
- 8) ALTERNATE PART: D2807-5 CAN BE MADE FROM ASSEMBLING D2807-1 (1) AND D2807-3 (2) (WEIGHT: 0.176 LBS)

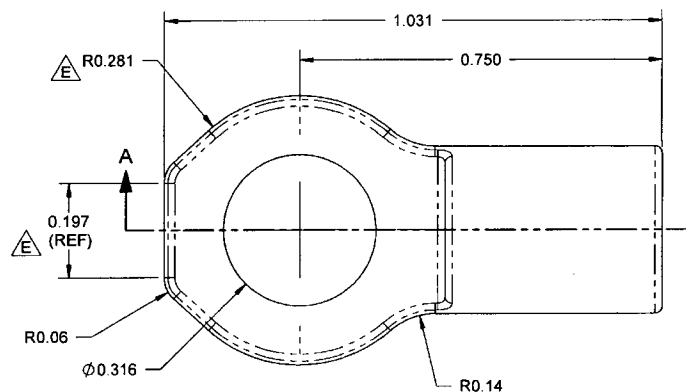
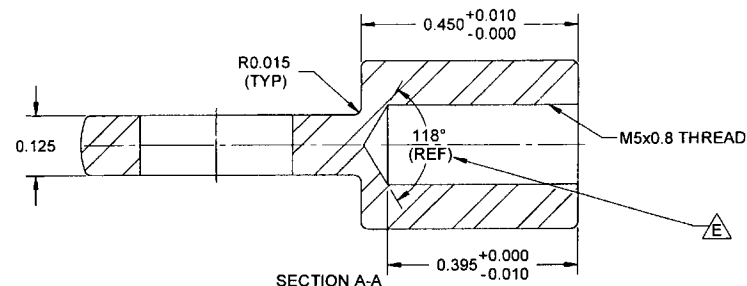


E	ADD D2807-5 GAS SPRING; D2807-1/-3 ASSEMBLY IS AN ALTERNATE TO D2807-5 GAS SPRING; UPDATE DIMENSIONS ON D2807-3	PH	07.12.28
D	ADDED D3671-1 PLACARD ADDED -041 ASSEMBLY UPDATED DWG	DC	07.09.27
C	CHANGE SPRING TO SS, ADD -3 LUG	CP	05.05.25
B	ADD FINISH	CP	05.03.16
A	NEW ISSUE	DS	00.11.03
REV.	DESCRIPTION	BY	DATE
DESIGN	AT	<b>DART AEROSPACE LTD</b> HAWKESBURY, ONTARIO, CANADA	
DRAWN	AT		
CHECKED	KE	DRAWING NO.	REV. E
MFG. APPR.	MP	D2807	SHEET 1 OF 3
APPROVED	MP	TITLE	SCALE
DE APPR.	MP	GAS SPRING	NTS
DATE	07.12.28	<small>COPYRIGHT © 2000 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD</small>	

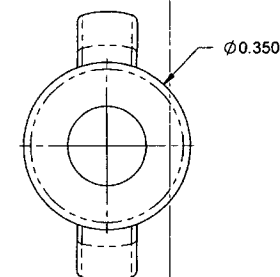
SHOP COPY  
RETURN TO  
ENGINEERING  
UNCONTROLLED COPY  
SUBJECT TO AMENDMENT  
WITHOUT NOTICE  
WORK ORDER  
NO. 44858



**D2807-1 GAS SPRING**  
SCALE 1:1



**D2807-3 LUG**



**D2807-1 GAS SPRING NOTES:**

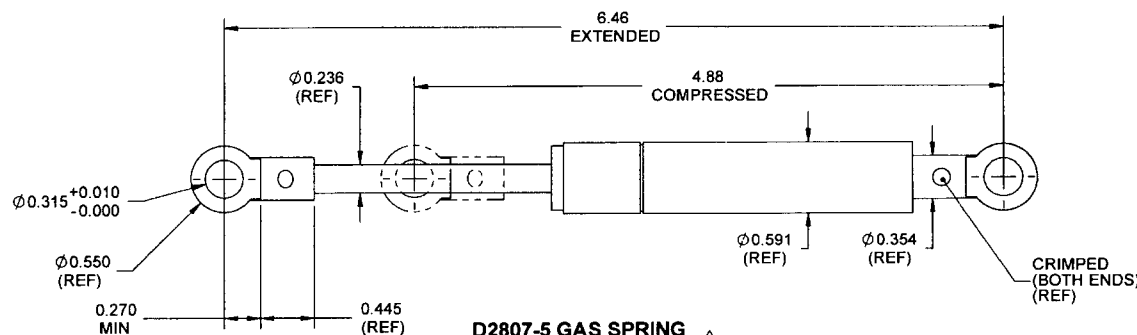
- 1) POSSIBLE SUPPLIER: ARVINMERITOR MOTION CONTROL SYSTEMS, LEICESTER, UK  
(P/N SXF6S6050080S6L-115N)  
(REF: 80MM LONG CYLINDER, 50MM STROKE, 115N LOAD)
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: N/A
- 6) IDENTIFICATION: N/A
- 7) WEIGHT: 0.144 LBS
- 8) SPECIFICATION: SS GAS SPRING  
ACCEPTABLE LOAD RANGE IS 25 LB (115 N) MIN TO 45 LB (200 N) MAX  
M5x0.8 THREADS

**D2807-3 LUG NOTES:**

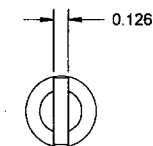
- 1) MATERIAL: AISI 303 ROUND BAR (REF. DART SPEC. M303R)
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.010 TO 0.015
- 6) IDENTIFICATION: N/A
- 7) WEIGHT: 0.016 LBS

DESIGN	#	<b>DART AEROSPACE LTD</b> HAWKESBURY, ONTARIO, CANADA	
DRAWN	#		
CHECKED	LE	DRAWING NO. <b>D2807</b>	REV. E SHEET 2 OF 3
MFG. APPR.		TITLE <b>GAS SPRING</b>	SCALE 4:1
APPROVED		COPYRIGHT © 2000 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD	
DE APPR.			
DATE	07.12.28		

SHOP COPY  
RETURN TO  
ENGINEERING  
UNCONTROLLED COPY  
SUBJECT TO AMENDMENT  
WITHOUT NOTICE  
WORK ORDER  
NO. 44858



**D2807-5 GAS SPRING**



**D2807-5 GAS SPRING NOTES:**

- 1) POSSIBLE SUPPLIER: LIFT SUPPORT TECHNOLOGIES, SASKATOON, CANADA (P/N 6/15-164/50-115N)
- 2) FINISH: N/A
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: N/A
- 6) IDENTIFICATION: N/A
- 7) WEIGHT: 0.169 LBS
- 8) SPECIFICATION: SS GAS SPRING WITH END FITTINGS  
ACCEPTABLE LOAD RANGE 25 LB (115 N) MIN TO 45 LB (200 N) MAX

DESIGN	PH	<b>DART AEROSPACE LTD</b>	
DRAWN	PH	HAWKESBURY, ONTARIO, CANADA	
CHECKED	HE	DRAWING NO.	REV. E
MFG. APPR.	HE	D2807	SHEET 3 OF 3
APPROVED	HE	TITLE	SCALE
DE APPR.	HE	GAS SPRING	4:1
DATE	07.12.28	COPYRIGHT © 2000 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD	

LS Technologies Canada Inc.

303 - 103 Street  
Saskatoon, SK  
S7N 1Y9

# Packing Slip

Date	Packing Slip #
2/12/2009	4763

Name / Address
Dart Aerospace Ltd 1270 Aberdeen St. Hawkesbury, ON K6A 1K7 Canada

Ship To
Main Finished Goods Location Dart Aerospace Ltd 1270 Aberdeen St. Hawkesbury, ON K6A 1K7 Canada

P.O. No.	Rep	Ship Date	Ship Via
7990	Nolan	2/12/2009	Purolator

Qty	Description
40	D2807 - 615-056-168-115N Stainless Gas Spring ✓
Shipping via PUROLATOR collect on account 7684382 - Tracking # 329070341295	
Total GST Business Number: 875007718	
Please remit to above address. Thank you for the business.	





303 – 103<sup>rd</sup> Street, Saskatoon, Saskatchewan, Canada S7N 1Y9  
Ph: (306) 683-5000 Fax: (306) 683-6403  
E-mail: [lstech@lstechnologies.ca](mailto:lstech@lstechnologies.ca) [www.liftsupporttechnologies.com](http://www.liftsupporttechnologies.com)

## Certificate of Compliance

This is to certify that the parts listed below meets specifications as required by your order.

40 Units: D2807 – 615 16450 115N Gas Spring

Manufactured from 304 Stainless Steel

Country of Manufacture: Canada

Date of Manufacture : 2008

This product is ROHS compliant.

We certify no mercury was used in the manufacture of this order.

Purchase Order # 00007990

Invoice # 4763

~~L S Technologies Inc Canada~~

Nolan Fehr  
Manager